

A NEW SPECIES OF IOSCYTUS FROM THE WESTERN UNITED STATES
(HEMIPTERA: SALDIDAE)

JOHN T. POLHEMUS, 3115 S. York, Englewood, Colorado

Several years ago I acquired the Hottes Collection of Saldidae, and in that collection was a single specimen of an undescribed species of *Ioscytus* from West Texas. The specimen was poor, so a description could not properly be based on it alone, but during 1963 I was fortunate in collecting good series of this insect in Colorado and at several locations in New Mexico. With abundant material at hand, a good comparison with other species of *Ioscytus* can be made and a description of the new species is now possible.

The new species described below will bring the number of species in the genus *Ioscytus* to five, plus one subspecies. *Ioscytus beameri* Hodgden is quite unlike the other species of the genus in body shape and general appearance, but probably should remain in the genus provisionally until more material is available. This problem and others concerning the genus will be treated in another publication.

IOSCYTUS COBBENI, N. SP.

Of moderate size, slender, general color black, long haired, macropterous.

Head: Black, shining, frons rugulose; postclypeus and anteclypeus red, praecellar spot and labrum brown; covered with short pale inconspicuous hairs and with usual three pairs of long erect hairs on frons and vertex and several additional black setae; vertex slightly carinate between eye and ocelli on each side; ocelli raised slightly; rostrum light brown, extending between hind coxae.

Thorax: Pronotum black, shining, smooth, with scattered long black hairs and inconspicuous light colored short hairs; lateral margins almost straight, narrowing moderately anteriorly; callus strongly raised, with circular deep impression in center; posterior lobe shorter than anterior lobe. Underparts black, clothed with fine silver hairs; acetabulae brown margined. Scutellum as wide as long, black, shining, faintly rugose; vestiture similar to pronotum.

Wings: Hemelytra fully developed; covered with scattered long straight black setae and a few inconspicuous short dark hairs; dull black, barely shining, with pale embolium varying in color from flavous to hyaline (fig. 1a); membrane clouded with deep black-brown, sometimes becoming sub-hyaline apically, with four cells.

Extremities: Antennal segments 1 and 2 yellowish red to red brown, stout; segments 3 and 4 somewhat incrassate, black; all segments clothed with short light hairs, and with scattered semi-short black hairs; antennal proportions (60 units = 1 mm.)

♂; segment 1, 22; segment 2, 43; segment 3, 41; segment 4, 38.

♀; segment 1, 23; segment 2, 45; segment 3, 43; segment 4, 39.

Legs, coxae testaceous; femora becoming red on apical half; clothed with short light hairs, and usual dark spines on tibia; apex of tarsus dark.

Genital Structures: Parandria, paramere, and median sclerotized structure of aedeagus (viewed from directly above) as figured (fig. 1b, c, d). Penisfilum coiled one and one half times.

Holotype (♂), length 3.7 mm., width 1.5 mm.

Allotype (♀), length 4.3 mm., width 1.8 mm.

Mean length of 10 ♂: 3.79 mm. (max. 4.0; min. 3.4).

Mean width of 10 ♂: 1.54 mm. (max. 1.6; min. 1.4).

Mean length of 10 ♀: 4.15 mm. (max. 4.5; min. 3.5).

Mean width of 10 ♀: 1.75 mm. (max. 1.9; min. 1.5).

Material: Holotype (♂), Hygiene, Colorado VIII-14-1963, J. T. Polhemus; Allotype (♀), Hygiene, Colorado, VI-2-1963, J. T. Polhemus. Paratypes as follows: 25 specimens, Hygiene, Colorado, from V-25 to VIII-14-1963, J. T. Polhemus; 3 specimens, Las Vegas, New Mexico, VIII-25-1963, J. T. Polhemus; 12 specimens, Jemez Spring, New Mexico, VIII-25-1963, J. T. Polhemus; 33 specimens, Maxwell, New Mexico, VIII-25-1963, J. T. Polhemus; 4 specimens, San Ysidro, New Mexico, VIII-25-1963, J. T. Polhemus; 6 specimens, Springer, New Mexico, VIII-25-1963, J. T. Polhemus; 1 specimen, El Paso, Texas, VIII-27-1934, C. J. Drake.

The Holotype, Allotype, and paratypes are in the collection of the author. Paratypes will also be sent to the U.S. National Museum, California Academy of Science, University of Kansas, and the private collections of H. C. Chapman and R. H. Cobben.

This species is named in honor of R. H. Cobben who has made outstanding contributions to our knowledge and understanding of the family Saldidae.

Comparative Notes: *Ioscytus cobbeni* is most closely related to *Ioscytus politus* Uhler, but can generally be separated from the latter species by the completely black corium and the lack of golden pubescence on the clavus. However specimens of *I. politus* from California have been examined (S. Dos Palos, California, Merced Co., California, XI-30-1962, H. C. Chapman) that are almost completely black and nearly devoid of golden pubescence. Chapman reports that totally black specimens exist (personal correspondence). These specimens do not have a light embolium or light red 1st and 2nd antennal segments and are therefore easily separable from *I. cobbeni*. More than a hundred specimens of *I. politus* from the Rocky Mountain region have been studied and thus far all have been semibrachypterous, whereas *I. cobbeni* is known only in the macropterous form.

I. cobbeni can be easily separated from its most nearly related congener by external characters, however the male parameres are also good specific characters. The paramere of *I. cobbeni* is longer, more strongly curved, and has a longer processus hamatus than *I. politus*.

Habitat: *Ioscytus cobbeni* was the commonest Saldid found at moderate altitudes (5000-6000 ft.) in Northern New Mexico during August of 1963. It seems to prefer stable habitats such as spring fed streams or seep areas. A high mineral content in the habitat water may also be preferred, as indicated by the occurrence in numbers at a mineral water seep South of Maxwell, New Mexico, at Jemez Hot Spring, New Mexico, and at specific Sulphur Springs on the South side of Rabbit Mountain near Hygiene, Colorado. The mineral content of the water is unknown

at collection locations near LasVegas, New Mexico (seep area), SanYsidro, New Mexico (seep area), and Springer, New Mexico (seep area and grassy area adjacent to small stream), however, the latter location is the only one of these where specimens were abundant.

Species found at the same locations as *I. cobbeni* were *Salda buenoi* McDunnough, *Salda lugubris* Say, *Micracanthia quadrimaculata* Champion, *Saldula comatula* Parshley, *Saldula hirsuta* Reuter, and *Saldula orbiculata* Uhler. *Ioscytus politus* Uhler apparently requires, or at least prefers, an alkaline situation, and while the two species have been taken in the same general area (within 15 miles of each other) they have not been seen together.

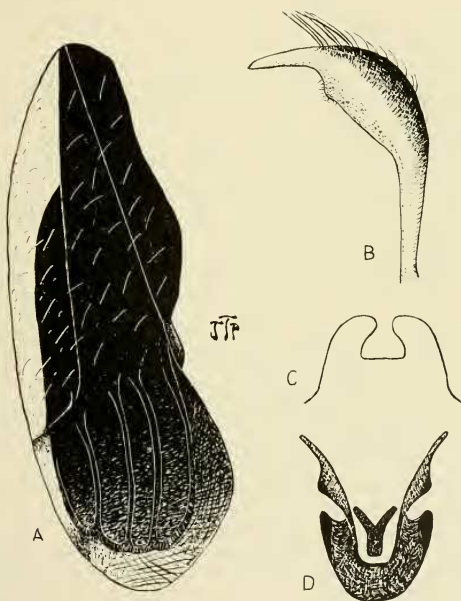


Fig. 1: *Ioscytus cobbeni*, n. sp. A. Left hemelytron of ♂. B. Left paramere. C. Parandria. D. Median sclerotized structure of aedeagus.